Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters	)	WT Docket No. 10-4

To: The Commission

REPLY COMMENTS OF
VOLKSWAGEN GROUP OF AMERICA, INC.

Volkswagen Group of America, Inc. (VWGoA), by and through counsel, and on behalf of itself and its US-based subsidiaries Audi, Bentley, Lamborghini and Bugatti (unless the context requires otherwise, jointly referred to as VWGoA), hereby replies to certain of the comments submitted in response to the issues raised in the Second Further Notice of Proposed Rulemaking, FCC 18-35, released March 23, 2018 (SFNPRM), in the above-captioned proceeding.

I. INTRODUCTION

In general, the comments of Verizon, AT&T Services, Inc. (AT&T) and CTIA demonstrate a fundamental hostility to the use of embedded automotive boosters, as well as a lack of understanding of the basic technical nature of these systems. Their suggested regulatory changes seem specifically intended to create a disincentive for auto manufactures to offer this technology to their customers.

For example, the carriers' primary concern seems to stem from the mistaken belief that embedded boosters are easily removed from one car and reinstalled in another, thereby encouraging the development of an unregulated secondary market. As will be demonstrated in greater detail below, it is the easily-transferable, mobile booster kits that are designed to be installed by the consumer that should be of concern to the carriers. A review of a random

selection of on-line, point-of-sale websites for various retailers of consumer-installed mobile booster kits suggests less than strict compliance with the consumer warning and registration requirements. In contrast, the alleged threats to their networks from embedded mobile boosters posited by the carriers are entirely illusory.

II. PERMITTING THE OWNERS OF CARS EQUIPPED WITH EMBEDDED BOOSTERS TO USE THE MAKE, MODEL AND VIN OF THE CAR WHEN REGISTERING WITH A CARRIER MAKES FAR MORE SENSE THAN USING THE MAKE, MODEL AND SERIAL NUMBER OF THE EMBEDDED BOOSTER.

VWGoA agrees with Verizon's proposal that owners of cars with embedded boosters be permitted to use the car's make, model and vehicle identification number (VIN) when registering with a carrier. See Verizon Comments at 9. This makes much more sense than using the embedded booster's data for several reasons.

First, such a change would better facilitate the identification of a malfunctioning booster by the Commission or a carrier. In the unlikely event of an embedded booster malfunctioning, reference to the affected carrier's data base would immediately identify the offending equipment as being in a specific car owned by a specific individual. There is no need for further information to be on file. Verizon's assertion that the currently-required booster data, plus the subject car's license plate, should be on file as well, would add nothing to achieving the central purpose of the registration requirement: being able to quickly identify the owner of a malfunctioning booster.

While the car's manufacturer will still want the data from a failed booster for, e.g., warranty purposes (with respect to both its customer as well as the supplier of the failed unit), the dealer performing the repair/replacement work can provide that information as part of its standard procedures. In the unlikely event of a rash of similar malfunctions sufficient to cause the Commission to question whether, e.g., a particular booster manufacturer is building devices consistent with the certification specifications, additional information can easily be obtained by the Commission from both the subject car and booster manufacturers.

A further benefit of the VIN approach is that it greatly simplifies registration compliance by subsequent owners who acquire an embedded booster-equipped car in the secondary (non-dealer) market. The buyer already knows the make and model of the car being purchased and the VIN is readily available on multiple, easily accessible locations on the car, as well as on state title and registration documents. Even if a private seller fails to mention the registration requirement in describing the various optional features on the car to the buyer, the new owner will almost certainly look through the manual for information about, e.g., the car's optional electronics suite and will quickly learn of the registration requirement, and the requisite information will be readily at hand. Additionally, as proposed in the SFNPRM, at para. 29 & n. 68, additional information regarding the registration requirement could be accessed through the manufacturer's customer portal.

III. THE CARRIERS' FEARS REGARDING NON-COMPLIANT BOOSTERS, INCLUDING REPLACEMENT BOOSTERS, ARE BASED ON A FUNDAMENTAL MISUNDERSTANDING OF THE NATURE OF THESE DEVICES.

CTIA speculates about the possible use of "uncertified" boosters by auto manufacturers, see CTIA Comments at 5, while AT&T expresses concern that the owner of a car with an embedded booster "may remove (or pay a mechanic to remove) an embedded booster . . . for the purpose of upgrading to a new booster, then sell the old one." AT&T Comments at 5. Both of these assertions demonstrate a fundamental misunderstanding of the nature of these devices, including their installation and operation.

These are not stand-alone devices with universal installation instructions of the sort one buys at the electronics store, or on-line, and self-installs. They are built into a car's integrated suite of communications/entertainment equipment. The auto manufacturers purchase these devices from major electronic component manufacturers, who must demonstrate, as a contractual matter, that the necessary equipment authorizations have been obtained and warrant their ongoing compliance with all technical specifications.

Moreover, assuming arguendo that a car owner would be foolish enough to pay an independent mechanic to locate and remove an embedded booster from his car, all he would have

accomplished is to void the relevant portion of his warranty. The only place to obtain a replacement is the dealer, and trying to sell the old one on, e.g., eBay will prove futile, as it can only be used in a car that has the appropriate proprietary circuitry, connectors, software, hardware and the like. One cannot remove an embedded booster out of an Audi and successfully install it in, e.g., a Buick, or even in another Audi, unless that Audi left the factory with an identical booster of its own. While dealers can remove and replace a faulty booster, they cannot install one from new, as the connectors, authorization codes and the like simply are not there; it is not a dealer-installed option like a trailer hitch or roof rack. It is a complicated piece of electronics that is integrated with a larger electronics package, the components and integration of which are unique and proprietary, as opposed to inexpensive, universal customer-installed devices available through an electronics retail outlet.

The carriers' speculation about rogue, non-certificated mobile boosters for sale in an unpoliced secondary market are likely to be realized, if at all, with respect to consumer-installed mobile boosters, particularly ones purchased on-line from a retailer who may be unaware of the point-of-sale notice requirements, or even more likely in a secondary on-line market for those self-installed devices. Manufacturer-installed embedded boosters pose no such threat.

IV. THERE IS NO MERIT TO THE CARRIERS' CLAIMS THAT THE PURCHASER OF A CAR WITH AN EMBEDDED BOOSTER IS SOMEHOW LESS LIKELY TO REGISTER THAT BOOSTER THAN ANY OTHER CONSUMER.

The carriers, each in their own way, seem to be of the opinion that the purchaser of a car with an embedded booster is somehow less able to understand the separate consumer warning about the booster that is specifically highlighted as part of the delivery process. Similarly, the carriers seem to view these consumers as just less inclined than the average citizen to comply with the law.

The carriers make much of the amount of paperwork involved in taking delivery of a new car. Indeed, there is considerable material involved in that process. That is why the dealers go to the time, effort and expense of guiding each customer through the major elements of the new car. As part of that process, considerable time is spent explaining various aspects of the car's

communications/entertainment package, including, where applicable, a review of the separate booster registration requirements, consistent with Audi's and Bentley's specific commitment to do so as part of their respective waiver requests. Once home with his new car, the typical consumer will use the customer manual (paper or on-line version) to further familiarize himself with the various special features of the car, including inputting required/favored settings to various components, which will re-enforce the cell booster registration requirement.

The carriers offer nothing beyond base speculation as to why this process in inadequate for their protection, or why this consumer is somehow inherently less likely to complete the registration process than someone who spent considerably less time and money on a self-installed booster acquired, e.g., on-line. Indeed, as noted above, at least some of the on-line retailers of consumer-installed boosters seem to take a fairly relaxed view of compliance with the point-of-sale labeling requirements.

Simply put, there is absolutely no reason to expand the existing labeling requirements or to impose on the delivering dealer the added burden of handling the registration process for the buyer of a car with an embedded booster. Particularly if the Commission were to modify the registration rule so that all that is required for registration of an embedded booster is the make, model and VIN of the car, buyers (whether at the initial sale or five secondary-market sales later) will have the necessary information readily at hand.

CONCLUSION

VWGoA made clear in its initial Comments that it can provide easily understood and quickly implemented directions for owners of embedded booster-equipped cars as to how to immediately disable a malfunctioning booster. It also demonstrated the ease with which a secondary-market purchaser can obtain knowledge of the registration requirement and the requisite information. Finally, VWGoA provided reasonable timelines for implementation of any new regulations, consistent with the constraints inherent in the automobile manufacturing process.

At bottom, VWGoA has endeavored to find the "balance" sought by the Commission, to achieve essential regulatory goals while still facilitating the use of the subject technology. See SFNPRM at para. 28. The carriers, on the other hand, appear to be intent on making the regulatory process so onerous as to be a disincentive to car manufacturers to continues to offer this technology to consumers, while offering no rational basis for doing so. The carriers' transparent efforts in this regard should be rejected.

VWGoA requests that whatever rule changes the Commission deems it necessary to adopt, it does so consistent with the foregoing and VWGoA's initial Comments.

Respectfully submitted,

VOLKSWAGEN GROUP of AMERICA, INC.

by: /s/ Jeffrey H. Olson

ST. LEDGER-ROTY & OLSON

1250 Connecticut Avenue, NW
Suite 700
Washington, DC 20036
202-454-9401
jolson@slrno.com

June 18, 2018

Its Attorneys